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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/636,014

08/06/2003

Claude Leon Hembert

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1542

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08/25/2006

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EXAMINER

GROSSO, HARRY A

ART UNIT

PAPER NUMBER

3727

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/636,014		HEMBERT, CLAUDE LEON	
	Examiner		Art Unit	
	Harry A. Grosso		3727	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3-5, 7, 9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brissier et al (4,815,605) (Brissier) in view of Cornelius (3,349,940) and Starling et al (4,573,603) (Starling).

2. Regarding claims 1, and 9, Brissier discloses a container or tank (14, Figure 1) with a dome end and a device (24, column 3, lines 39-46) for protecting the container comprising a shell (28) and a compressible element (30) disposed in an entirety of the space between the shell and the tank. Brissier does not teach an annular projection on the shell. Cornelius discloses a tank with dome ends and a shell (13, 14, Figure 1) having an annular projection and delimiting a space between the interior face of the shell and the exterior wall of the container. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of an annular projection as disclosed by Cornelius in the device disclosed by Brissier to allow the container to stand on end and provide additional protection to the dome ends from impact. It would have been obvious to fill the entirety of the space between the shell and the tank with the compressible element as taught by Brissier, including the annular projection.

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3. Brissier and Cornelius do not teach the shell is made of a synthetic resin.

Starling discloses a tank with dome ends and a shell (C, D, Figures 1 -3,) that goes over the dome ends and is made from a synthetic resin (column 2, lines 34-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of a shell that goes over a portion of the dome ends and is made from a synthetic resin as disclosed by Starling in the container disclosed by Brissier and Cornelius because it is known in the art to use a shell made from a synthetic resin with containers including tanks to protect them from shock and provide means for handling.

Regarding claims 4 and 12, Brissier discloses the device covers the entirety of the dome of the container and a portion of the side wall.

Regarding claims 3 and 11, Brissier discloses the compressible element is polyurethane foam (column 3, lines 42-43).

Regarding claims 5 and 13, Brissier discloses the shell has an end corresponding to the side wall of the container, a first wall parallel to an axis of the container and an end corresponding to the dome of the container, a second wall perpendicular to the axis of the container with the first and second walls meeting to form a rounded zone (Figure 1).

Regarding claim 7, Brissier discloses the device is removably mounted on the container (column 3, lines 43-46).

4. Claims 1, 3-9, 11-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hembert (5,004,120) in view of Brissier, Cornelius and Starling.

Regarding claims 1, 4, 9, 12 and 20, Hembert discloses a container composed of a composite material intended to contain a fluid under pressure (column 1, lines 7-12) with a dome end and a device (column 2, lines 37-51) for protecting the container comprising a shell (22) and a compressible element (23) disposed in an entirety of the space between the shell and the tank (left side of Figure 1).

Hembert does not teach that the device covers the entirety of the dome of the container and a portion of the side wall. Brissier discloses a container with a protective device that covers the entirety of the dome of the container and a portion of the side wall (24, Figure 1, column 3, lines 39-46) with a compressible element disposed in an entirety of the space between the shell and the tank. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of a protective device that covers the entirety of the dome of the container and a portion of the side wall as disclosed by Brissier in the container disclosed by Hembert to provide protection for the entire dome and adjacent side wall portion against damage.

5. Hembert and Brissier do not teach an annular projection on the shell. Cornelius discloses a tank with dome ends and a shell (13, 14, Figure 1) having an annular projection and delimiting a space between the interior face of the shell and the exterior wall of the container. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of an annular projection as disclosed by Cornelius in the device disclosed by Hembert and Brissier to allow the container to stand on end and provide additional protection to the dome ends from impact. It would have been obvious to fill the entirety of the space between the shell and

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the tank with the compressible element as taught by Hembert and Brissier, including the annular projection.

Hembert, Brissier and Cornelius do not teach the shell is made of a synthetic resin. Starling discloses a tank with dome ends and a shell (C, D, Figures 1 -3,) that goes over the dome ends and is made from a synthetic resin (column 2, lines 34-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of a shell that goes over a portion of the dome ends and is made from a synthetic resin as disclosed by Starling in the container disclosed by Brissier because it is known in the art to use a shell made from a synthetic resin with containers including tanks to protect them from shock and provide means for handling.

6. Regarding claims 5 and 13, Hembert does not teach that the shell has an end corresponding to the side wall of the container, a first wall parallel to an axis of the container and an end corresponding to the dome of the container, a second wall perpendicular to the axis of the container with the first and second walls meeting to form a rounded zone. Brissier discloses a device and the shell has an end corresponding to the side wall of the container, a first wall parallel to an axis of the container and an end corresponding to the dome of the container, a second wall perpendicular to the axis of the container with the first and second walls meeting to form a rounded zone (Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of a protective device with the shell having an end corresponding to the side wall of the container, a first wall parallel to an axis of the container and an end corresponding to the dome of the container, a second wall

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perpendicular to the axis of the container with the first and second walls meeting to form a rounded zone as disclosed by Brissier in the container disclosed by Hembert to provide improved protection for the entire dome and adjacent side wall portion against damage.

7. Regarding claims 3 and 11, Hembert does not disclose the compressible element is an expanded synthetic material. Brissier discloses the compressible element is polyurethane foam (column 3, lines 42-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of a compressible element of polyurethane foam as disclosed by Brissier in the container disclosed by Hembert to provide a material that is light weight and has known capability to absorb an impact.

8. Regarding claim 7, Hembert discloses the device is removably mounted on the container (column 2, lines 37-45).

Regarding claims 6 and 14, the containers of claims 1 and 9 are disclosed and further discloses a connecting piece at a top of the dome (6). Both Cornelius (15, Figure 1) and Starling (28, Figure 2) disclose a connecting piece and the annular ring extends beyond the end of the connecting piece. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of an annular ring on the device extending beyond the end of the connecting piece as disclosed by Starling and Cornelius to protect the connecting piece and allow the container to stand on end without interference from the connecting piece.

Regarding claims 8 and 16, the device of claims 6 and 14 is disclosed as discussed in the preceding paragraph and Hembert further discloses that the connecting piece is threaded (25) at the free end and the device surrounds the connecting piece so an exterior face of the shell is set back from the end of the connecting piece and a tapped ring (24) is screwed onto the connecting piece to mount the device on the dome (Figure 1, column 2, lines 37-40).

Regarding claim 15, the container of claim 14 is disclosed and Hembert further discloses that the device is removably mounted to the container as discussed in the preceding paragraph.

9. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hembert, Brissier, Cornelius and Starling as applied to claim 9 in view of Dulisse et al (6,793,095) (Dulisse). Hembert, Brissier, Cornelius and Starling disclose the invention except for the synthetic resin being a thermoplastic resin.

Dulisse discloses a pressure tank with a dome end and a shell 42, Figures 4, 5 and 9) that goes over a portion of the dome end and is made from acrylonitrile-butadiene-styrene (abs) (column 4, lines 40-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of a shell 42, Figures 4, 5 and 9) that goes over a portion of the dome end and is made from acrylonitrile-butadiene-styrene as disclosed by Dulisse in the container disclosed in claim 9 because it is known in the art to use abs with containers including pressure tanks for a shell over a portion of the dome end.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 3-9 and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry A. Grosso whose telephone number is 571-272-4539. The examiner can normally be reached on Monday through Thursday from 7am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Newhouse can be reached on 571-272-4544. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Nathan Newhouse
Supervisory Patent Examiner
Art Unit 3727

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